

**PCT**

**NOTIFICATION OF ELECTION**

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Commissioner  
US Department of Commerce  
United States Patent and Trademark  
Office, PCT  
2011 South Clark Place Room  
CP2/5C24  
Arlington, VA 22202  
ETATS-UNIS D'AMERIQUE  
in its capacity as elected Office

Date of mailing (day/month/year) 04 January 2001 (04.01.01)	
International application No. PCT/AU00/00639	Applicant's or agent's file reference 2302522/DBW
International filing date (day/month/year) 07 June 2000 (07.06.00)	Priority date (day/month/year) 07 June 1999 (07.06.99)
Applicant LOW, Sydney, Gordon	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:  
01 December 2000 (01.12.00)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was  
☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Authorized officer Charlotte ENGER Telephone No.: (41-22) 338.83.38
---	---

# PATENT COOPERATION TREATY

WO 00/75818  
PCT/AU00/00639

PCT

## NOTICE INFORMING THE APPLICANT OF THE COMMUNICATION OF THE INTERNATIONAL APPLICATION TO THE DESIGNATED OFFICES

(PCT Rule 47.1(c), first sentence)

From the INTERNATIONAL BUREAU

To:

WEBBER, David, Brian  
Davies Collison Cave  
1 Little Collins Street  
Melbourne, Victoria 3000  
AUSTRALIE

WEDNESDAY. 27 DEC 2000

Date of mailing (day/month/year) 14 December 2000 (14.12.00)		IMPORTANT NOTICE	
Applicant's or agent's file reference 2302522/DBW			
International application No. PCT/AU00/00639	International filing date (day/month/year) 07 June 2000 (07.06.00)	Priority date (day/month/year) 07 June 1999 (07.06.99)	
Applicant SHARINGA NETWORKS INC. et al			

1. Notice is hereby given that the International Bureau has communicated, as provided in Article 20, the international application to the following designated Offices on the date indicated above as the date of mailing of this Notice:  
AG,AU,DZ,KP,KR,MZ,US

In accordance with Rule 47.1(c), third sentence, those Offices will accept the present Notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

2. The following designated Offices have waived the requirement for such a communication at this time:

AE,AL,AM,AP,AT,AZ,BA,BB,BG,BR,BY,CA,CH,CN,CR,CU,CZ,DE,DK,DM,EA,EE,EP,ES,FI,GB,GD,  
GE,GH,GM,HR,HU,ID,IL,IN,IS,JP,KE,KG,KZ,LC,LK,LR,LS,LT,LU,LV,MA,MD,MG,MK,MN,MW,MX,  
NO,NZ,OA,PL,PT,RO,RU,SD,SE,SG,SI,SK,SL,TJ,TM,TR,TT,TZ,UA,UG,UZ,VN,YU,ZA,ZW

The communication will be made to those Offices only upon their request. Furthermore, those Offices do not require the applicant to furnish a copy of the international application (Rule 49.1(a-bis)).

3. Enclosed with this Notice is a copy of the international application as published by the International Bureau on  
14 December 2000 (14.12.00) under No. WO 00/75818

### REMINDER REGARDING CHAPTER II (Article 31(2)(a) and Rule 54.2)

If the applicant wishes to postpone entry into the national phase until 30 months (or later in some Offices) from the priority date, a demand for international preliminary examination must be filed with the competent International Preliminary Examining Authority before the expiration of 19 months from the priority date.

It is the applicant's sole responsibility to monitor the 19-month time limit.

Note that only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination.

### REMINDER REGARDING ENTRY INTO THE NATIONAL PHASE (Article 22 or 39(1))

If the applicant wishes to proceed with the international application in the national phase, he must, within 20 months or 30 months, or later in some Offices, perform the acts referred to therein before each designated or elected Office.

For further important information on the time limits and acts to be performed for entering the national phase, see the Annex to Form PCT/IB/301 (Notification of Receipt of Record Copy) and Volume II of the PCT Applicant's Guide.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. (41-22) 740.14.35	Authorized officer J. Zahra Telephone No. (41-22) 338.83.38
--	---

MONDAY 24 JUL 2000

From the INTERNATIONAL SEARCHING AUTHORITY

To:

DAVIES COLLISON CAVE  
1 Little Collins Street  
MELBOURNE VIC 3000

PCT

NOTIFICATION OF TRANSMITTAL OF  
THE INTERNATIONAL SEARCH REPORT  
OR THE DECLARATION

(PCT Rule 44.1)

DW

Date of mailing 21 JUL 2000  
(day/month/year)

Applicant's or agent's file reference  
2302522.

FOR FURTHER ACTION See paragraphs 1 and 4 below

International application No.

International filing date

PCT/AU00/00639

7 June 2000

Applicant

SHARINGA NETWORKS INC. et al

1. ☒ The applicant is hereby notified that the international search report has been established and is transmitted herewith

**Filing of amendments and statement under Article 19:**

The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46):

**When?** The time limit for filing such amendments is normally 2 months from the date of transmittal of the international search report; however, for more details, see the notes on the accompanying sheet.

**Where?** Directly to the International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland  
Facsimile No.: (41-22) 740.14.35

For more detailed instructions, see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect is transmitted herewith.

3. ☐ With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.

☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. **Further action(s):** The applicant is reminded of the following:

Shortly after 18 months from the priority date, the international application will be published by the International Bureau.

If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication.

Within 19 months from the priority date, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later)

Within 20 months from the priority date, the applicant must perform the prescribed acts for entry into the national phase before all designated Offices which have not been elected in the demand or in a later election within 19 months from the priority date or could not be elected because they are not bound by Chapter II.

Name and mailing address of the ISA/AU

AUSTRALIAN PATENT OFFICE  
PO BOX 200, WODEN ACT 2606, AUSTRALIA  
E-mail address: pct@ipaaustralia.gov.au  
Facsimile No. (02) 6285 3929

Authorized officer

DALE E. SIVER

Telephone No. (02) 6283 2196

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>2302522</b>	<div style="display: flex; justify-content: space-between;"> <div style="text-align: center;"><b>FOR FURTHER ACTION</b></div> <div>see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.</div> </div>	
International application No. <b>PCT/AU00/00639</b>	International filing date ( <i>day/month/year</i> ) <b>7 June 2000</b>	(Earliest) Priority Date ( <i>day/month/year</i> ) <b>7 June 1999</b>
Applicant <b>SHARINGA NETWORKS INC. et al</b>		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 4 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (See Box II).

4. With regard to the title, ☒ the text is approved as submitted by the applicant.  
☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract, ☒ the text is approved as submitted by the applicant  
☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No.1

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure

☐ because this figure better characterizes the invention

☐ None of the figures

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU00/00639

**A. CLASSIFICATION OF SUBJECT MATTER**Int. Cl. <sup>7</sup>: G06F 17/60, 151:00

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC: AS ABOVE

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPAT,INSPEC (affiliate, content, charging)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	US 5 948 061 (Merriman et al.) 7 September 1999 Abstract, column 1, lines 62-65, column 8, lines 32-38	1,7
X	US 5 819 092 (Ferguson et al.) 6 October 1998 Abstract, column 3, lines 40-50, column 4, lines 28-32,53-60, column 12, lines 15-23, column 29, lines 41-44, column 30, lines 28-30, 51-55, column 31, lines 1-7	1,3,7-9
X	US 5 717 923 (Dedrick) 10 February 1998 Whole document, especially column 2, lines 12-15, column 4, lines 14-16 column 8, lines 1-4, column 9, lines 34-36, 62-67, column 11, line 62 to column 12, line 6, column 13, lines 19-25, column 15, lines 1-10	1,3-9



Further documents are listed in the continuation of Box



See patent family annex

## \* Special categories of cited documents:

"A"	document defining the general state of the art which is not considered to be of particular relevance	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E"	earlier application or patent but published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O"	document referring to an oral disclosure, use, exhibition or other means	"&"	document member of the same patent family
"P"	document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search

13 July 2000

Date of mailing of the international search report

21 JUL 2000

Name and mailing address of the ISA/AU

AUSTRALIAN PATENT OFFICE  
PO BOX 200, WODEN ACT 2606, AUSTRALIA  
E-mail address: pct@ipaaustralia.gov.au  
Facsimile No. (02) 6285 3929

Authorized officer

DALE E. SIVER

Telephone No : (02) 6283 2196

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU00/00639

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	"Vicarious certification and billing agent for Web Information service" (Yoon) IEEE Proceedings of 13 <sup>th</sup> Int. Conf. on Information Networking – ICOIN'98 pp 344-349 dated 21-23 January 1998 Whole document	1,7
Y	"Value-added Internet: a pragmatic TINA-based path to the Internet and PSTN Integration" (De Zen et al.) IEEE TINA 97 pp 13-21 Global Convergence of Telecommunications and Distributed Object Computing 17-20 November 1997 Figure 1, Sections 2.1,2.2,2.3 , Figure 3, Section 7	1,7

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

International application No.  
**PCT/AU00/00639**

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report				Patent Family Member			
US	5819092	CA	2204736	DE	69511425	EP	792493
		JP	10508964	WO	9615505		
							END OF ANNEX

# PATENT COOPERATION TREATY

THURSDAY 18 APR 2001  
*[Signature]*

From the:  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

<b>To:</b>  DAVIES COLLISON CAVE 1 Little Collins Street MELBOURNE VIC 3000
---

## PCT NOTIFICATION OF TRANSMITTAL OF INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Rule 71.1)

Date of mailing <i>day/month/year</i>	<b>18 APR 2001</b>
--	--------------------

Applicant's or agent's file reference 2302522
--

### IMPORTANT NOTIFICATION

International Application No. <b>PCT/AU00/00639</b>	International Filing Date 7 June 2000	Priority Date 7 June 1999
--	--	------------------------------

Applicant SHARINGA NETWORKS INC. et al
---

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
  
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
  
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translations to those Offices.
  
4. **REMINDER**  
  
 The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices)(Article 39(1))(see also the reminder sent by the International Bureau with Form PCT/IB/301).  
  
 Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.  
  
 For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide

Name and mailing address of the IPEA/AU  AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaaustralia.gov.au Facsimile No. (02) 6285 3929	Authorized officer  <b>DALE E. SIVER</b> Telephone No. (02) 6283 2196
---	--



**PATENT COOPERATION TREATY**  
**PCT**  
**INTERNATIONAL PRELIMINARY EXAMINATION REPORT**  
(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 2302522	<b>FOR FURTHER ACTION</b>	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416).
International Application No. <b>PCT/AU00/00639</b>	International Filing Date ( <i>day/month/year</i> ) 7 June 2000	Priority Date ( <i>day/month/year</i> ) 7 June 1999
International Patent Classification (IPC) or national classification and IPC  Int. Cl. <sup>7</sup> G06F 17/60, 151:00		
Applicant  SHARINGA NETWORKS INC. et al		

1.	This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.																								
2.	This REPORT consists of a total of 3 sheets, including this cover sheet.  <input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).  These annexes consist of a total of    sheet(s).																								
3. This report contains indications relating to the following items: <table style="width: 100%; border: none;"> <tr> <td style="width: 5%;">I</td> <td style="width: 5%; text-align: center;"><input checked="" type="checkbox"/></td> <td>Basis of the report</td> </tr> <tr> <td>II</td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Priority</td> </tr> <tr> <td>III</td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td>IV</td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Lack of unity of invention</td> </tr> <tr> <td>V</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td>VI</td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Certain documents cited</td> </tr> <tr> <td>VII</td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Certain defects in the international application</td> </tr> <tr> <td>VIII</td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Certain observations on the international application</td> </tr> </table>		I	<input checked="" type="checkbox"/>	Basis of the report	II	<input type="checkbox"/>	Priority	III	<input type="checkbox"/>	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	IV	<input type="checkbox"/>	Lack of unity of invention	V	<input checked="" type="checkbox"/>	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	VI	<input type="checkbox"/>	Certain documents cited	VII	<input type="checkbox"/>	Certain defects in the international application	VIII	<input type="checkbox"/>	Certain observations on the international application
I	<input checked="" type="checkbox"/>	Basis of the report																							
II	<input type="checkbox"/>	Priority																							
III	<input type="checkbox"/>	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability																							
IV	<input type="checkbox"/>	Lack of unity of invention																							
V	<input checked="" type="checkbox"/>	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement																							
VI	<input type="checkbox"/>	Certain documents cited																							
VII	<input type="checkbox"/>	Certain defects in the international application																							
VIII	<input type="checkbox"/>	Certain observations on the international application																							

Date of submission of the demand 1 December 2000	Date of completion of the report 12 April 2001
Name and mailing address of the IPEA/AU  AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaustalia.gov.au Facsimile No. (02) 6285 3929	Authorized Officer   <b>DALE E. SIVER</b> Telephone No. (02) 6283 2196

**I. Basis of the report**

1. With regard to the elements of the international application:\*
- ☒ the international application as originally filed.
- ☐ the description,      pages , as originally filed,  
    pages , filed with the demand,  
    pages , received on      with the letter of
- ☐ the claims,      pages , as originally filed,  
    pages , as amended (together with any statement) under Article 19,  
    pages , filed with the demand,  
    pages , received on      with the letter of
- ☐ the drawings,      pages , as originally filed,  
    pages , filed with the demand,  
    pages , received on      with the letter of
- ☐ the sequence listing part of the description:  
    pages , as originally filed  
    pages , filed with the demand  
    pages , received on      with the letter of
2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.  
 These elements were available or furnished to this Authority in the following language which is:
- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).
3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, was on the basis of the sequence listing:
- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished
4. ☐ The amendments have resulted in the cancellation of:
- ☐ the description,      pages
- ☐ the claims,      Nos.
- ☐ the drawings,      sheets/fig.
5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. Statement**

Novelty (N)	Claims 1-9	<b>YES</b>
	Claims	<b>NO</b>
Inventive step (IS)	Claims 1-9	<b>YES</b>
	Claims	<b>NO</b>
Industrial applicability (IA)	Claims 1-9	<b>YES</b>
	Claims	<b>NO</b>

**2. Citations and explanations (Rule 70.7)**

- D1 WO 98/57285 (Messer) 17 December 1998 New Citation (family of US 5 991 740)
- D2 US 5 948 061 (Merriman et al.) 7 September 1999 (See Box VI)
- D3 US 5 819 092 (Ferguson et al.) 6 October 1998
- D4 US 717 923 (Dedrick) 10 February 1998
- D5 "Vicarious certification and billing agent for Web Information Service" (Yoon) IEEE ICOIN'98

**Novelty**

D1 is the closest prior art with respect to tracking user referrals from advertising on web pages to merchant web sites. Although the affiliate content is distinguished for the purposes of charging the merchant, D1 does not disclose charging the user. Claims 1-9 are directed to charging a user, and therefore are novel in light of D1.

Documents D2 to D5 have been reconsidered since the ISR and are distinguished by either not charging a user, not charging an affiliate or not recording the content accessed by a user.

The claims satisfy novelty under PCT rules.

**Inventive Step**

There is no suggestion in the above documents of either charging a user or charging an affiliate for content accessed by a user. It would not be obvious to charge a user for access to non-affiliate content, therefore the claims satisfy PCT rules for inventive step.

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
14 December 2000 (14.12.2000)

PCT

(10) International Publication Number  
**WO 00/75818 A1**

(51) International Patent Classification<sup>7</sup>: G06F 17/60, 151/00

(21) International Application Number: PCT/AU00/00639

(22) International Filing Date: 7 June 2000 (07.06.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: PQ 0808 7 June 1999 (07.06.1999) AU

(71) Applicant (for all designated States except US): SHARINGA NETWORKS INC. [US/US]; 1310 King Street, Wilmington, DE 19801 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): LOW, Sydney, Gordon [AU/AU]; 9 Evans Road, Kew, Victoria 3101 (AU).

(74) Agents: WEBBER, David, Brian et al.; Davies Collison Cave, 1 Little Collins Street, Melbourne, Victoria 3000 (AU).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

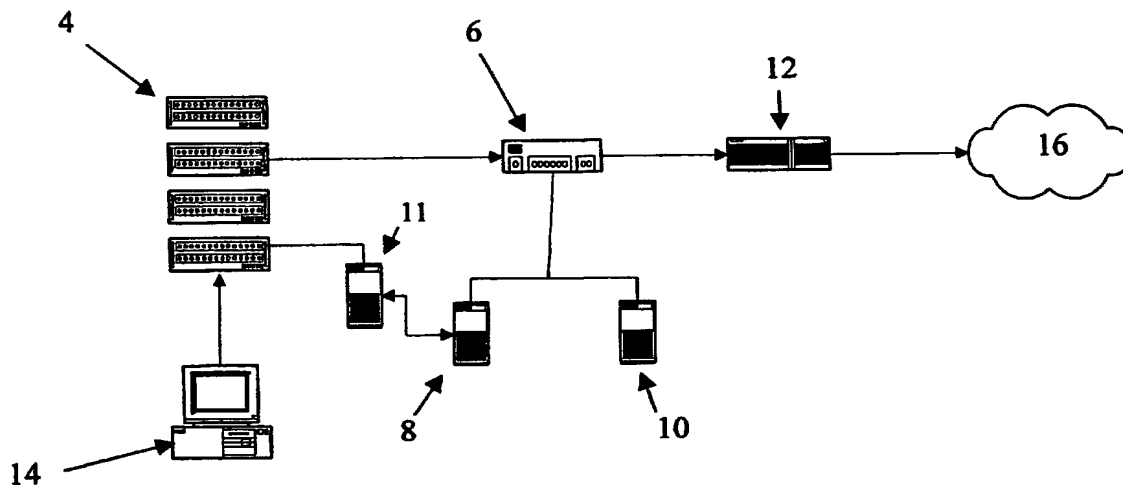
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— With international search report.

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: A CHARGING METHOD AND SYSTEM



(57) Abstract: A charging method, including maintaining a record of content of a communications network accessed by a user of the network, determining on the basis of the record a charge for an affiliate based on access of content associated with the affiliate, and determining on the basis of the record a charge for the user based on access of other content of the record.

WO 00/75818 A1

- 1 -

## A CHARGING METHOD AND SYSTEM

The present invention relates to a method and system for charging for use of a  
5 communications network, such as the Internet.

Most Internet users currently connect to the Internet via the equipment of an Internet  
service provider (ISP), and are charged for the time that they remain connected. The applicant  
has developed a method and system to provide users with access to certain content, without  
10 attracting the session connection charge, as described in the specification of International  
Patent Application No. PCT/AU00/00418, herein incorporated by reference and referred to as  
"the access system specification". The "free" content can be provided by organisations or  
individuals that are considered to be affiliates or associates of the ISP. The cost of providing  
the connection to the free content however still needs to be recovered by the ISP. Also the  
15 affiliates, in return for providing the free content, will wish to receive information which  
indicates that they are deriving a benefit from the affiliation with the ISP. It is desired to  
provide a method and system for charging which addresses the above problems or at least  
provides a useful alternative to existing charging methods or systems.

20 In accordance with the present invention there is provided a charging method,  
including:

maintaining a record of content of a communications network accessed by a user of the  
network;

determining if said content is affiliate content;

25 generating a charge for an affiliate based on access of said affiliate content; and  
generating a charge for said user based on access of other content of said record.

The present invention also provides a charging method, including:

30 maintaining a record of content of a communications network accessed by a user of the  
network;

- 2 -

determining on the basis of said record a charge for an affiliate based on access of content associated with said affiliate; and

determining on the basis of said record a charge for said user based on access of other content of said record.

5

The present invention also provides a charging system and charging software for executing steps of the method.

10 A preferred embodiment of the present invention is hereinafter described, by way of example only with reference to the accompanying drawings, wherein:

Figure 1 is a block diagram of a preferred embodiment of a communications network access system; and

Figure 2 is a flow diagram of a preferred embodiment of a charging method executed by the system.

15

A communications access system, as shown in Figure 1, includes a plurality of remote access servers (RASs) 4, a layer four or higher switch 6, a database server 8, a web server system 10 and a router 12. The RASs 4 are provided to allow the computers 14 of remote users to dial into the system using standard telecommunication lines and modems and connect to the input ports of the RASs 4, respectively. On connection to a port of a RAS 4, the RAS 4 and the user's computer 14 establish a unique TCP/IP session and the IP traffic for that session is switched by the switch 6. Once the user is authenticated or approved, as described below, the user's computer 14 is allowed to access requested data on the Internet 16. The web server system 10 is used to control pages presented to a user 14 connected to the RAS 4 and handle authentication using a member profile database maintained on the database server 8, as described below. A RADIUS (Remote Authentication Dial In User Service) authentication server 11 is also provided for use in authentication. As far as the user 14 is concerned, the equipment 4, 6, 8, 10, 11 and 12 of the access system is part of the Internet.

30

The equipment 4 to 12 preferably includes standard commercially available hardware and basic database, web server and Internet access software which is known to those skilled

- 3 -

in the art and is used in the access systems of most ISPs. The equipment 4 to 12 then also includes unique program code to manage and control each session. The layer four or higher switch 6 is another exception. The switch 6 is normally used by ISPs to balance the traffic handled by the RASs 4. An example of a suitable layer four switch is the AceDirector AD3™  
5 produced by Alteon WebSystems Inc. The access system differs from that offered by ISPs, as described in the access system specification, in that the layer four switch 6 is used to connect users to the web server system 10 and control access to the Internet 16 for the users 14 on the basis of a limited number of access states encoded in the switch 6. Alternatively the unique program code and the equipment 4 to 12 could be substituted, entirely or in part, by unique  
10 integrated circuits, such as ASICs, to execute the same functions. The system is the same as that described in the access system specification, except that it further includes software components executed by either the database server 8 or the web server 10 to execute the charging method described below.

15 On connecting to the Internet using the access system, all of the locations, or URLs, which the user 14 accesses are passed by the switch 6 and stored in the database 8 as part of a member access record. With the locations, an initial time of access is also recorded. This occurs at step 20 as shown in Figure 2. Thus for each TCP session for a user, the member access record indicates the start of the session and holds a set of locations and initial access  
20 times. The differences between the initial access times provide information on the time which a user spends at each location during the session.

When the access system is to be used as a charging system, to facilitate charging of users and affiliates who provide free content, the member access records are retrieved from  
25 the database 8 at step 22 and sequentially processed. A determination is made at step 24 as to whether the recorded locations of a member or user record correspond to affiliate locations. Affiliate locations are those locations on the Internet 16 or web server 10 designated by URLs which hold free content of parties affiliated with the provider of the system. If the location is not an affiliate location, then this is reported at step 26 and a charge record compiled for the  
30 user based on the user's access of the locations in the member access record which are not affiliate locations. The charge may be a standard flat rate charge or a time rate charge based

- 4 -

on the time of access, or any other charging basis which may be employed by ISPs to charge users.

If it is determined at step 24 that a location is an affiliate location, then this is reported  
5 at step 28 and details of the access of the affiliate location retained in order to charge the  
affiliate. An affiliate record is generated at step 30 based on the captured data which would  
include the affiliate locations accessed, the access times, and the period of time for which the  
locations are accessed, together with identifying details concerning the user accessing the  
locations. The affiliate record is stored on the database 8 and can be accessed as part of a  
10 secure web site on the web server 10 for affiliates. The data held in the affiliate records can  
be reported to the affiliates in various formats on the secure web site. The affiliates can be  
charged automatically at step 28 based on time rates for access or other charging schemes  
based on the user's access of the affiliate locations. The charge can also be determined and  
rendered after subsequent processing of the affiliate record. The charges can be passed on to  
15 members and affiliates in various ways, such as by invoicing or electronic credit card  
transactions.

The above charging method and system is particularly advantageous as it establishes  
for ISPs an entirely different charging model to that which is presently exploited. Content  
20 providers, i.e. affiliates, can be charged as well as users who connect to the Internet. This is  
also particularly advantageous for users as they are provided with access to content free of  
charge. The content providers are also provided with detailed information by the affiliate  
record concerning the benefit they are deriving from providing the content. The actual  
locations accessed and the user details are provided to the content providers. As the access  
25 system has access profiles attached to each user, these profile details can also be provided to  
content providers in the affiliate records to provide further information on the users accessing  
their content.



- 5 -

Many modifications will be apparent for those skilled in the art without departing from the scope of the present invention as herein described with reference to the accompanying drawings.

- 6 -

CLAIMS:

1. A charging method, including:  
maintaining a record of content of a communications network accessed by a user of the  
5 network;  
determining if said content is affiliate content;  
generating a charge for an affiliate based on access of said affiliate content; and  
generating a charge for said user based on access of other content of said record.
- 10 2. A charging method as claimed in claim 1, wherein said record includes locations of a  
communications network which represents said content, and said determining step involves  
determining if said locations correspond to affiliate content.
3. A charging method as claimed in claim 1, including a plurality of said affiliate having  
15 respective affiliate content, and generating the charge for said affiliate based on said user  
accessing said respective affiliate content.
4. A charging method as claimed in claim 1, including generating for said affiliate an  
affiliate record of said locations corresponding to said respective affiliate content accessed by  
20 said user.
5. A charging method as claimed in claim 4, wherein said affiliate record includes access  
time for each location and for each user.
- 25 6. A charging method as claimed in claim 5, wherein said affiliate record is accessible  
via the communications network.
7. A charging method, including:  
maintaining a record of content of a communications network accessed by a user of the  
30 network;

- 7 -

determining on the basis of said record a charge for an affiliate based on access of content associated with said affiliate; and

determining on the basis of said record a charge for said user based on access of other content of said record.

5

8. A charging system including system components for executing the steps of the charging method as claimed in any one of the preceding claims.

9. Charging software stored on a computer readable storage medium and having code for  
10 executing the steps of the charging method as claimed in any one of claims 1 to 7.

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/AU00/00639**A. CLASSIFICATION OF SUBJECT MATTER**Int. Cl. <sup>7</sup>: G06F 17/60, 151:00

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC: AS ABOVE

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
WPAT,INSPEC (affiliate, content, charging)**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	US 5 948 061 (Merriman et al.) 7 September 1999 Abstract, column 1, lines 62-65, column 8, lines 32-38	1,7
X	US 5 819 092 (Ferguson et al.) 6 October 1998 Abstract, column 3, lines 40-50, column 4, lines 28-32,53-60, column 12, lines 15-23, column 29, lines 41-44, column 30, lines 28-30, 51-55, column 31, lines 1-7	1,3,7-9
X	US 5 717 923 (Dedrick) 10 February 1998 Whole document, especially column 2, lines 12-15, column 4, lines 14-16 column 8, lines 1-4, column 9, lines 34-36, 62-67, column 11, line 62 to column 12, line 6, column 13, lines 19-25, column 15, lines 1-10	1,3-9



Further documents are listed in the continuation of Box



See patent family annex

* Special categories of cited documents:		"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A"	document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E"	earlier application or patent but published on or after the international filing date	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&"	document member of the same patent family
"O"	document referring to an oral disclosure, use, exhibition or other means		
"P"	document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search  
13 July 2000

Date of mailing of the international search report

21 JUL 2000

Name and mailing address of the ISA/AU  
AUSTRALIAN PATENT OFFICE  
PO BOX 200, WODEN ACT 2606, AUSTRALIA  
E-mail address: pct@ipaaustralia.gov.au  
Facsimile No. (02) 6285 3929

Authorized officer

DALE E. SIVER

Telephone No : (02) 6283 2196

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU00/00639

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	"Vicarious certification and billing agent for Web Information service" (Yoon) IEEE Proceedings of 13 <sup>th</sup> Int. Conf. on Information Networking – ICOIN'98 pp 344-349 dated 21-23 January 1998 Whole document	1,7
Y	"Value-added Internet: a pragmatic TINA-based path to the Internet and PSTN Integration" (De Zen et al.) IEEE TINA 97 pp 13-21 Global Convergence of Telecommunications and Distributed Object Computing 17-20 November 1997 Figure 1, Sections 2.1,2.2,2.3 , Figure 3, Section 7	1,7

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

International application No.  
**PCT/AU00/00639**

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report				Patent Family Member			
US	5819092	CA	2204736	DE	69511425	EP	792493
		JP	10508964	WO	9615505		
							END OF ANNEX